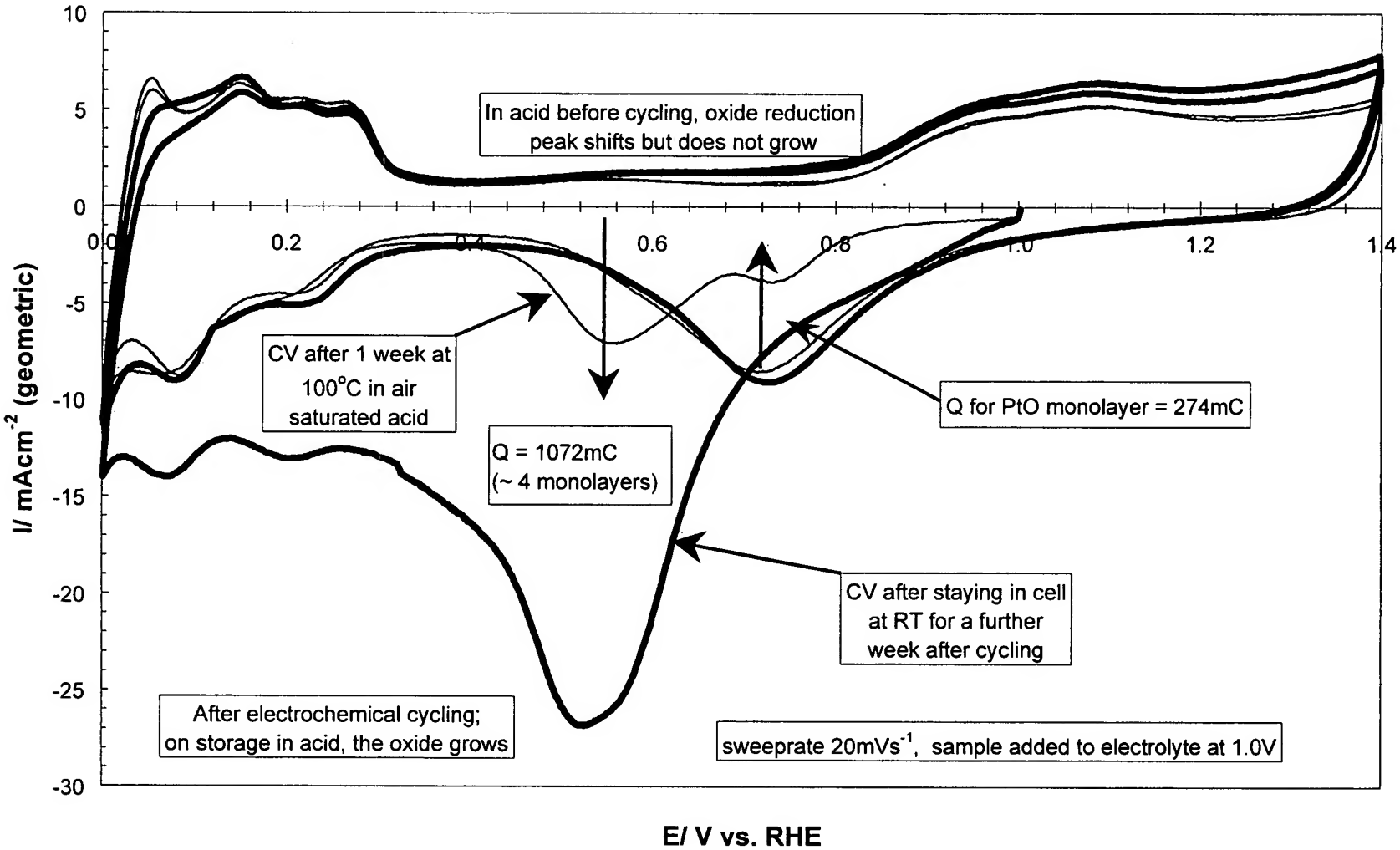
Figure 1


10
5
0
-5
-10
-15
-20
-25
-30
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
I/ mAcm-2 (geometric)
E/ V vs. RHE
In acid before cycling, oxide reduction peak shifts but does not grow
CV after 1 week at 100°C in air saturated acid
Q = 1072mC (~ 4 monolayers)
Q for PtO monolayer = 274mC
CV after staying in cell at RT for a further week after cycling
After electrochemical cycling; on storage in acid, the oxide grows
sweeprate 20mVs-1, sample added to electrolyte at 1.0V